

# GLOBALIZATION, INTERDEPENDENCE AND SUSTAINABILITY

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## Summary

The world is increasingly interdependent in many ways – socially, economically and environmentally. Global economic integration without a concerted attempt to avoid possible negative social and environmental outcomes is highly problematic. Over-concentration of industries owing to comparative economic advantage will in some cases have negative environmental effects. Inequitable economic distribution may well have negative effects on environmental sustainability as well as the more obvious and immediate negative social effects. Global economic integration can also, however, have positive effects with regard to sustainability, including the acceleration of technology transfer. The best prospects for maximizing positive effects and minimizing negative effects lie in seeking through global-scale minimum environmental and social standards thus lessening global economic competition on this basis.

Globalization is a process of economic, social and political change that has been developing for more than a century. Within this process communications, social interaction and the organization of markets and production increasingly reach beyond national borders. Globalization simultaneously involves an expansion of international investment and trade, the integration of social, cultural and economic activities, and the acceleration of international communications, travel, and personal interaction. It is most often defined in terms of economic integration and interdependence. Globalization is

perhaps best understood as an extension of the process that saw the unification of today's national states from, in the case of some European nations, disparate smaller feudal entities. That is, the expanding scale of industrial production and the evolution of communications and transportation technologies has for a very long time consistently pushed the scale of social interaction and economic integration beyond existing socio-political borders.

Many analysts argue that the contemporary acceleration of globalization has significantly weakened the political capacities of nation-states. As Susan Strange put it: "Today it seems that the heads of governments may be the last to recognize that they and their ministers have lost the authority over national societies and economies that they used to have. Their command over outcomes is not what it used to be. Politicians everywhere talk as if they have the answers to economic and social problems, as if they really are in charge of their country's destiny. People no longer believe them."

Some of the possible political and policy effects of global economic integration include an increasingly limited effectiveness of Keynesian domestic fiscal policy adjustments, declining prospects for enacting or collecting taxation on the profits of increasingly mobile international corporations, an erosion of cultural autonomy, and reduced national autonomy in terms of social and environmental policy. Regarding fiscal policy adjustments it is clear that domestic deficit spending will not greatly stimulate economies where export sales approach or exceed domestic sales. Regarding tax collection corporations have flexibility within the bounds of the law in terms of managing production, internal pricing and fund transfers so that a larger proportion of profits are reported within lower-tax nations. Most important, perhaps, social and environmental policies are increasingly determined within "race to the bottom" pressures among competing national economies.

There is, however, another body of literature regarding globalization concerned, as Paterson put it, to resist the notion that globalization effectively makes politics impossible. That is, other analysts argue against any too easy conclusion that governments have lost the capacity to act independently in the face of international competitive constraints. Such conclusions, it is argued, can become a self-fulfilling prophecy -- in a context where such analyses prevail within intellectual discourse, globalization and global economic competition can then be used as an excuse by governments to avoid doing anything that they do not wish to do. McQuaig and others argue that globalization itself has been actively and deliberately fostered by some of the very governments that later claim to be constrained by its pressures. Again, as Paterson observes, for some analysts, globalization is: "either a neoliberal slight of hand, an act of ideology designed to bring about the world it purports to describe . . . or a piece of leftist defeatism, where globalization is interpreted as closing off political possibilities for social change."

Regardless of one's views regarding these debates most analysts would conclude that in a context of globally integrated production systems, governments must be at the very least mindful of the domestic policies of other nations. At the same time it is also clear that most national governments most of the time still have choices. They can choose to reduce taxes and cut back regulation to enhance the competitive position of domestic

firms (or domestic branches of global firms) *or* they can choose to work with other governments to harmonize tax rates and policy practices, including labor protections, social expenditures and environmental regulations. The race to the bottom is only possible when most nations proceed as if an unconstrained competition necessarily exists. The alternative is to establish common or parallel practices in any number of policy realms.

There is also a considerable debate regarding the historic patterns in the evolution of global economic integration. Some argue that the world economy was, by some measures, essentially globalized by the period prior to World War I and has only recently recovered to that level following the upheavals of World War I, depression, World War II and, to a lesser extent, the cold war. That is, while globalization has clearly advanced in terms of trade and investment, from the late 1940s through to today (2002), that is not the whole picture historically. Others argue that other aspects of globalization should also be seen as being as important as trade treaties and cross-border investment. These would include technological change (communications and long-distance management technologies), cultural homogenization and the spread of consumer culture, and increased economic policy coordination. Whatever the outcome of these debates, there is agreement that global economic integration and policy coordination is as high now as it has ever been and both show every sign of continuing to increase in the future.

## **1. The Roots of Globalization**

Even centuries ago, of course, activities such as travel, trade and cultural intermingling that reached beyond the nation-state were well established. As noted, the late nineteenth century and early twentieth century reached levels of international trade (as a percentage of total economic activity) that were not achieved again until well after World War II. As well, since very early in the industrial revolution resources have been extracted throughout the world to feed into the industries of Europe, North America and Japan. What is different now is that industrial production and marketing of nearly every variety is increasingly being organized in an integrated way on a global scale. Some of the consequences of this new level of integration will be considered below, but today's process will be understood better if we first briefly consider the relationship between the early days of the industrial revolution and the formation of the nation-state itself.

It was the press of trade and markets beyond the boundaries of feudal political organization that saw the emergence of the nation-state as the dominant mode of political organization. Karl Polanyi, for example, makes clear in *The Great Transformation* the ways in which early industrial age economic capacities, as well as the commercial and social needs of that period, broke down feudal barriers and forced the creation of larger polities and wider jurisdictional arrangements -- new or more broadly empowered nation-states were necessary to simultaneously create national, and to serve international, markets and to protect society and the economy itself from the excesses of those markets. Larger-scale markets promoted, and perhaps even required, larger-scale political and social organization.

Similarly today the global reorganization of economic life challenges and threatens to

overwhelm political life organized on the basis of nation-states. As has been noted, the tendency of the scale of economic organization to reach beyond the scale of political organization is not a process of recent origin. What is distinctive in the present era, thus far, is the general failure of political organization to proceed to the next scale level – effective regional and/or global governance. There are of course exceptions to this distinction -- most notably the structures and practices of the European Union and the growing array of global environmental treaties. Both of these initiatives at least implicitly recognize the pressures which economic integration without political integration can create. Otherwise, however, there remains a tendency to assume that trade and commercial agreements can somehow indefinitely stand apart from other aspects of governance. Several centuries of history suggest otherwise. Economic integration without policy coordination and globally established minima may well tend to undermine wage levels, trade union and human rights, social programs and environmental protection everywhere.

Where the transformations of the nineteenth century were driven by the mass production of textiles, steel, railroads, and machinery, the more thoroughgoing globalization of the end of the twentieth century is made possible by advances in telecommunications, transportation and, above all, computerization. National and even global trade, and the nation-state itself, resulted from industrialization; globally integrated economic enterprises and economies are only now fully possible. This new reality has both positive and negative potential; arguably the former will be advantaged if we have the wisdom to learn from history. As Polanyi put it, a self-regulating market requires the institutional separation of society into an economic and political sphere rather than having an economic sphere that is merely a function of the social sphere. A global economy, then, suggests some form of global social and political order and, as we will see shortly, the new levels of productive capacity that we have reached also make visible the extent to which the “economic sphere” is contained within an environmental, as well as a social, sphere.

## **2. Globalization and Interdependence**

The process of globalization has made the nations and peoples of the world increasingly interdependent in many ways. This interdependence has economic, environmental and social dimensions. It is analytically useful to consider these three dimensions separately.

### **2.1 Economic Interdependence**

International trade and investment have increased significantly over much of the past century, except for the period from the onset of World War I through World War II. Economic interdependence has also come to include many other aspects of economic life and -- since the beginnings of the age of computerization, telecommunications and low-cost travel and shipping -- has taken new forms including the worldwide structural integration of production and marketing. This process -- the very essence of contemporary globalization -- has accelerated throughout the 1980s and 1990s. As Greider has noted, in the 1980s global bond financing has increased sharply and international bank loans more than quadrupled (to \$3.6 trillion). Moreover, global scale corporations are growing perhaps even more rapidly. Sales of the 500 largest

multinational firms grew more than sevenfold between 1971 and 1991, from \$721 billion to \$5.2 trillion.

These firms are increasingly global in origin and structure, each operating in almost every nation in the world. In 1971, again according to Greider, 280 of the 500 largest firms were based in the United States; by 1991 this number was 157 of 500. Since the mid-1990s cross-continental mergers have accelerated, perhaps most dramatically symbolized by global media firms, global-scale "virtual" banks, and the creation of the Daimler-Chrysler Corporation. Major brand names are now established globally through electronic communications systems that are increasingly global in nature. The ideal brand representative comes to be someone like the noted golfer Tiger Woods, whose ethnic origins are at once Asian (Thai) and African, citizenship is American and athletic abilities are especially noted throughout North America, Europe, and Australasia, including Japan. Marketing is now truly global and so too is production.

Both globally integrated production and the rapid and ever-accelerating movement of finance capital are rooted in computerization. As Greider put it: "Thanks to the reliable data collected by computerization, a CEO and his team can skip over the company's middle-rung bureaucracy and directly command operations from afar, including factories and markets dispersed around the world." At the same time global financial transactions take place continuously and at a pace that defies most, if not all, control strategies. The traded volume of United States Treasury debt (\$2.4 trillion) turns over every eight days; foreign exchange transactions, mostly speculative in nature, are in the trillions of dollars per day worldwide. Stock and other forms of financial trading are even faster. All such transactions are completely global in character.

## **2.2 Social Interdependence**

Social interdependence is also increasing very rapidly. This aspect of interdependence takes many forms including cultural interpenetration and integration (sometimes seen as a cultural homogenization that produces a countertrend of resurgent cultural nationalism), a possible trend of downward pressure on employment, wages and terms and conditions of work and perhaps the partial development of a global civil society.

Global cultural integration is most commonly associated with American television, Hollywood films, world music and commercial advertising. Seven of the ten most popular television programs in South Africa are of U. S. origin. Global advertising budgets are now in the hundreds of billions of dollars annually, having increased sevenfold from 1950 to 1990. (Barber, 62) Films now earn greater export revenue for the United States economy than do automobiles. Saatchi and Saatchi of Great Britain, one of the largest global advertising agencies, operates in 80 countries and buys 20% of all television advertising time. A significant share of all media advertising originates from within a small number of nations and/or passes through a small number of dominant, mostly Western, firms. Single corporations spend billions of dollars on advertising worldwide and numerous brand names are themselves now recognized globally and are in and of themselves worth billions. Single ad campaigns are sometimes now aimed at a significant proportion of the world's population.

Another form of social interdependence is in the widespread need for ever-expanding employment opportunities in the face of automated production and the downsizing made possible by computerization. As Greider notes, "Some major American corporations wasted billions buying new computers in the 1980s before they realized that they were missing the point. The managerial challenge was not to put a computer on everyone's desk. It was to deploy computers so as to eliminate many of the desks." While an ever-higher percentage of global economic activity is concentrated within the 500 largest global corporations, the total employment within those corporations has remained almost constant for several decades. The watchwords of the globally interdependent economy of the later part of the twentieth century were downsizing and re-engineering. The resulting reality is an increased social interdependence in the form of a worldwide demand for market access, investment, and employment opportunities. Related to this is an increasing economic and social inequality within virtually every nation of the world.

Another dimension of global social interdependence is contained in the nascent stages of what has been termed global civil society. An increasing number of organizations other than corporations are also operating on a multinational, regional or global basis. These would include educational institutions, social and charitable organizations such as Oxfam, as well as environmental organizations such as Greenpeace, the World Wildlife Federation (WWF) and the International Union for the Conservation of Nature (IUCN). These will be discussed further in section 5. All components of a potential global-scale civil society should be enhanced in their development by the spread of the internet and the worldwide web.

### **2.3 Environmental Interdependence**

Most early conservation and environmental concerns were essentially local in nature. A factory or mine might pollute a particular lake or river. A particular city might have an air quality problem owing to a locally specific combination of industries, activities and climatic factors. A particular animal species might be threatened by over-hunting, as was the bison in the Great Plains of North America. As well, from very early in human history local habitats were severely disrupted, as were the forests of China many centuries ago when overused for the production of ceramics in wood-fired kilns. Only in this century, however, have many of the most significant environmental problems been continental or even global in nature. Acidic depositions, and many other forms of pollution, have no regard whatever for international political borders. Other problems are so generalized as to pose risks for the planet as a whole, as is the case with climate warming or ozone depletion in the upper atmosphere.

Some aspects of environmental interdependence have, of course, always been with us, as in the case of migratory animal and bird species -- nature has never been cognizant of human political boundaries. But environmental interdependence is now far more widespread, frequent and complex. Many examples, only a few of which are elaborated here, illustrate this fact. The Arctic regions serve as a sink for pollutants emitted primarily within industrialized regions of many nations. The atmospheric releases from Chernobyl have also been widespread. Poaching of rare and endangered animal species in Africa, Canada and elsewhere is sustained by sales of animal parts in Asia and

elsewhere. North American songbird populations are negatively affected by losses of habitat within the tropical rainforests of Latin America. Climate warming resulting primarily from fossil fuel use in wealthy countries has likely already contributed to the damage to coral reef ecosystems throughout the tropical oceans and seas.

In some cases these problems have been developing for millennia. Rykiel noted that habitat loss and related biodiversity problems are the result of very long-term trends: "This transition from a wilderness planet to a tame planet started about 10,000 years ago with the rise of agriculture, and the magnitude of change mirrors the growth of the human population. Human habitations are no longer islands in a sea of wilderness; instead, wilderness islands float in a sea of humanity." Many nonhuman species do not fare well in islands and fragmented patches of habitat and even if on protected territory are, without corridors, vulnerable. Other articles in this same volume make it clear that this reality is abundantly the case on both small and large scales. All humans and all species are ever increasingly interdependent as a result of rapidly increasing human numbers, as well as for other reasons.

Pollution movement, for example, is far from a "simple" matter of upstream and downstream -- toxics move by air, water and through foodchains as well as across media. Airsheds and even atypical air movement patterns, for example, have a very great influence on water quality. Water quality in the Great Lakes has been measurably affected by airborne toxaphene emissions from Texas petrochemical plants moving northwards against prevailing wind patterns. Numerous other examples of toxic chemical mobility are known throughout the world. Moreover, a wide variety of pollutants, both air borne and sea borne are channelled to the ecologically vulnerable high Arctic -- the best known example here being the toxic contamination of polar bear livers by DDT (long after, and thousands of miles from where, the pesticide was produced or used). The patterned flow of toxics into the Arctic is proof that few, if any, nations can on their own resolve the environmental problems within their national territory. Many environmental problems are now irretrievably international.

It is important to understand some of the specific details of interdependence in at least one case. In the late 1980s it was determined that Inuit women in northern Labrador had more than five times more pesticides in their breast milk than did women within the industrialized countries in general. The chemicals in question had not been used within the Arctic, or indeed anywhere near to where these women lived. As well, DDT -- one of the pesticides found to still contaminate the Arctic -- was banned by 34 countries more than 20 years ago. While DDT levels are now beginning to slowly drop within the Arctic ecosystem, new inputs from tropical countries (which still in some cases use the pesticide to combat malarial mosquitoes) continue to arrive even today.

The flow of pesticides and PCBs to the Arctic involves complex processes. One geophysical determinant of toxic accumulation in the far north is the fact that such chemicals evaporate readily in warmer climates, travel to the Arctic on air currents, fall as snow or rain, but do not re-evaporate very rapidly at low temperatures. As well, chemicals that make their way to the oceans by many means are there absorbed by plankton and move northwards on ocean currents. The plankton are consumed by fish and the chemicals in turn eventually end up in the fatty tissue of seals, a prime food

source of human Arctic inhabitants (and polar bears). The complex and continuous movement of toxic substances is one of the core reasons why exclusively local environmental governance, or even exclusively national environmental governance, is no longer sufficient.

When there is no territorial and jurisdictional match of benefits and costs, issues can only be resolved at a higher jurisdictional level. Otherwise one jurisdiction gains the economic benefits of non-abatement while other jurisdictions suffer the environmental consequences. In more and more cases that level is multilateral or global. Environmental interdependence is thoroughgoing and functions in both directions. Global climate and biodiversity, for example, are both affected by human activities within every nation on the planet. The air, water and food that all humans consume are increasingly affected by humans at a very great distance from the consumers in question.

These are only some examples of environmental interdependence. Clearly all nations have an interest in the environmental impacts that take place within some or many other nations if only for the impacts which ultimately redound within their own borders. More than that there is a sense in which the atmosphere, oceans, forests and wild species of the whole world belong to us all. All human lives would be lessened were there fewer or no elephants, tigers, bears, cougars, parrots, or lemurs living in the wild. The over-fishing of most ocean fisheries has already had a more tangibly economic and physical impact on many humans from Newfoundland to South Asia.

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### Biographical Sketch

**Robert Paehlke** is Professor and Chair of the Environmental and Resource Studies Program at Trent University in Peterborough, Ontario, Canada. He is the author of *Environmentalism and the Future of Progressive Politics* (Yale University Press, 1989) and editor of *Conservation and Environmentalism: An Encyclopedia* (Garland Publishers, 1995). He was a founding editor (1971) of *Alternatives Journal*, currently published at the University of Waterloo in Ontario, Canada and has published more than 100 articles and chapters on environmental policy and politics.